Reply to Office Action of September 7, 2010

## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

11. (Currently Amended) A curable composition comprising a binder bearing at least one ethylenically unsaturated group, and functionalized particles of pyrogenic silica, colloidal silica, or silicone resins, which possess at least one ethylenically unsaturated group and contain radicals of the formula I,

$$= \operatorname{Si-CR}^{3}_{2} - A - D - C \qquad (I),$$

$$= \operatorname{Si-CH}_{2} - O - C - C = \operatorname{CH}_{2} \qquad (I),$$

where the particles are prepared by reacting

- (a) particles of a metal oxide, metal-silicon mixed oxide, silicon dioxide, colloidal silicon dioxide, organopolysiloxane resin or combination thereof, the particles possessing functionality selected from Me-OH, Si-OH, Me-O-Me, Me-O-Si-, Si-O-Si, Me-OR<sup>†</sup> and Si-OR<sup>1</sup>, and having an average diameter of less than 1000 nm,
  - (b) with  $\underline{\alpha}$ -organosilanes of the general formula II,

$$(R^{\dagger}O)_{3-n}(R^{2})_{n}Si-CR^{3}_{2}-A-D-C$$
 (II),

selected from the group consisting of methacrylomethyltrimethoxysilane, methacrylomethyldimethylmethoxsilane, and

S/N: 10/599,285 Reply to Office Action of September 7, 2010

their hydrolysis or condensation products, [[or]] and mixtures thereof, and

(c) and optionally water[[,]].

where

R<sup>1</sup> is hydrogen or a hydrocarbon radical having 1 to 6 carbon atoms, whose earbon chain is optionally interrupted by nonadjacent oxygen, sulfur or NR<sup>4</sup> groups,

R<sup>2</sup> is a hydrocarbon radical having 1 to 12 carbon atoms, whose carbon chain is optionally interrupted by nonadjacent oxygen, sulfur or NR<sup>4</sup> groups,

R<sup>3</sup>— is hydrogen or a hydrocarbon radical having 1 to 12 carbon atoms, whose carbon chain is optionally interrupted by nonadjacent oxygen, sulfur or NR<sup>‡</sup> groups,

R<sup>4</sup>— is hydrogen or a hydrocarbon-radical having 1 to 12 carbon atoms,

A is oxygen, sulfur,  $-NR^{\dagger}$  or -N-(D-C),

D is a carbonyl group, or an alkylene, cycloalkylene or arylene radical having 1 to 12 carbon atoms, the carbon chain optionally interrupted by nonadjacent oxygen, sulfur or NR<sup>‡</sup> groups,

C is an ethylenically unsaturated group,

Me is a metal atom, and

n is 0, 1 or 2.

12. (Currently Amended) The composition of claim 11, wherein the particles are selected from pyrogenic silica, colloidal silica, and silicone resins particles.

13. - 14. (Cancelled).

- 15. (Previously Presented) The composition of claim 11, wherein the ethylenically unsaturated groups in the binder are capable of free-radical, cationic or anionic polymerization.
- 16. (Previously Presented) The composition of claim 11, wherein the ethylenically unsaturated groups in the binder are polymerizable by actinic radiation or thermal treatment.

S/N: 10/599,285 Atty Dkt No. WAS 0807 PUSA Reply to Office Action of September 7, 2010

17. (Previously Presented) The composition of claim 11, wherein the

ethylenically unsaturated groups in the binder are selected from vinyl groups, methacrylate

groups, acrylate groups, acrylamide groups, and mixtures thereof.

18. (Currently Amended) [[The]] A process for coating a substrate,

comprising applying to a surface of said substrate a composition of claim 11, and curing said

composition.

19. - 21. (Cancelled).

22. (New) The composition of claim 11, wherein the ethylenically

unsaturated groups in the binder are polymerizable by actinic radiation, the composition further

comprising at least one photoinitiator.

-4-